RESIDENTIAL BUILDING CODE PLAN REVIEW

Plan Check Review List for Single-Family Residences, Duplexes, and Garages

The items listed below are commonly omitted from plans submitted for review. Advance preparation by applicants to satisfy these requirements will help expedite the plan review process. Be advised: Just as specific items on this list may not apply to specific projects, this list also does not necessarily include all requirements for all projects; other items may apply. Please use this list as a guide only.

A. GENERAL REQUIREMENTS

1. Planner plan check approval may be required.
2. Electrical plan check approval may be required.
3. County Fire plan check approval may be required.
4. Additional plan check fees may be required for insufficient plan check progress.

B. PLAN REQUIREMENTS

1. The plans must adhere to the **current** building code (2007 CBC) and all county amendments. *Note on the plans:* "These plans shall comply with the **2007** *California Building Code* and all applicable County of San Diego codes and ordinances."
2. On sheet _____ provide a note titled "Scope of Work" describing the work to be performed and identifying the buildings and structures included under this permit.
3. Submit two sets of fully dimensioned plot plans drawn to scale, showing the location, size, and use of all structures on the lot. Properly identify property lines and lot dimensions. Provide dimensions between structures and from structures to property lines. Show all easements.
4. The plans are incomplete. The plan check will continue when complete sets of plans are submitted. Use this list as a guide to help you prepare a complete set of plans.
5. The plans must be prepared using accepted drafting procedures and practice. We recommend you retain the services of an experienced design professional to help you prepare your plans and respond to the circled corrections on this list.
6. Provide two sets of engineering calculations prepared and signed by a California-licensed civil engineer or architect for: ❑ gravity loads, ❑ wind/seismic loads, ❑ retaining walls, ❑ other
7. The structural plans must bear the stamp and wet signature of a California-licensed civil engineer or architect.
8. Provide a letter from a California-licensed civil engineer or architect stating that, prior to final inspection, the engineer or architect will provide a report verifying and certifying the construction complies with the approved plans. Hidden construction shall be verified by testing and/or destructive examination.
9. All plans shall contain foundation and framing plans with the same orientation as the floor plan.
10. Provide legend/definitions for all symbols, shaded areas, etc., used on plans.
11. Name, label, and specify the use of all rooms.
12. Clearly distinguish between new and existing construction.
13. General, vague notes such as "build per code" are not acceptable. Provide notes specific to the project.
14. Provide a sheet index coordinated with plans.

C. SITE REQUIREMENTS

1. Post site identification cards and call for site inspection. Additional corrections may result from this inspection.
2. This project may be located in a watercourse or flood area. Department of Public Works approval is required.
3. Minor grading permit and rough grading approval from this department are required.
4. Rough grading approval from Department of Public Works is required.
5. Compaction report required (2 copies).
6. Certification form DPLU #73 required (2 copies).
7. Compaction reports over five (5) years old must include an update letter by a Civil Engineer licensed in California.
8. *Note on the plans:* "The inspector will recheck for expansive soils and/or grading requirements at the first foundation inspection."
9. On the plot plan, clearly indicate the location and square footage of land-disturbance activity.
10. Provide the Waste Discharge Identification Number (WDID) that is obtained from the State Water Resources Control Board (SWRCB) when the total area of land disturbance is one (1) acre or more. To obtain the WDID, state regulations require that a Notice of Intent (NOI) and a fee be filed with the SWRCB. Additionally, contact the SWRCB regarding their requirements for a Stormwater Pollution Prevention Plan (SWPPP).
11. Provide a completed Stormwater Applicability Checklist (form LUEG:SW #101). Select construction and permanent Best Management Practices (BMPs) in tables I and II.
12. Stormwater Applicability Checklist (form LUEG:SW #101) is incomplete.
13. On the plot plan or specified BMP plan, use a symbol to identify the proposed location of each construction and permanent BMP selected on the Stormwater Applicability Checklist. Provide a table or legend that defines each BMP symbol used. Use the attached BMP plan sample (form DPLU #272) as a guide only. Please use the symbols shown in the example. Your project may not use all of the BMPs shown in the example.
14. Show general direction of site drainage and sediment control at the downhill perimeter of all disturbed areas.

D. DESIGN REQUIREMENTS

1. Specify all window sizes and operation types (e.g., slider, casement, single-hung, etc.). Items D.2, D.3, D.10, and Section G will be evaluated at next re-check.
2. Provide window area of at least 8% of the floor area in each room **or** show on utility plan permanently wired lighting supplying average illumination of 10 foot-candles over area of the room at 30" height. (CBC 1205.2 and 1205.3)
3. Provide openable door/window area to the outdoors of at least 4% of the floor area in each room **or** provide **designed** mechanical ventilation system supplying continuous outdoor air and exhaust per the *California Mechanical Code* and show on utility plan. (CBC 1203.4.1 and CMC Chapter 4)
4. Provide adequate opening in common wall between _____ and _____ to meet natural lighting requirements of item D.2. The opening must be at least 50% of the common wall area **and** at least 10% of the floor area of the interior room or 25 sq. ft., whichever is greater. (CBC 1205.2.1)
5. Provide adequate opening in common wall between _____ and _____ to meet natural ventilation requirements of item D.3. The opening must be at least 8% of the floor area of the interior room or 25 sq. ft., whichever is greater. (CBC 1203.4.1.1)
6. Habitable rooms (except kitchens) shall not be less than 7'-0" in any dimension or 70 sq. ft. in area. Kitchens shall be at least 50 sq. ft. in area with 3'-0" clearance between counters and appliances/walls. (CBC 1208.1 and 1208.3)
7. Show 7'-6" minimum ceiling height for habitable rooms (except kitchens) and hallways. (CBC 1208.2)
8. Show 7'-0" minimum ceiling height for kitchens, storage rooms, laundry rooms, and bathrooms. (CBC 1208.2)
9. Show permanently wired smoke detectors for new construction at the following locations (CBC 907.2.10.1.2):
   a) in each sleeping room;
   b) on the ceiling or wall outside each separate sleeping area;
   c) at each story within the dwelling unit.

10. Sleeping rooms and basements must have an exterior egress door or window (CBC 1026.2, 1026.3 and 1026.5) with:
    a) 5.7 sq. ft. minimum net clear openable area (5.0 sq. ft. for grade-level openings);
    b) 24" minimum net clear openable height;
    c) 20" minimum net clear openable width;
    d) bottom of the clear opening not greater than 44" above the floor;
    e) direct opening to public way or yard/court opening to public way;
    f) window wells of 9 sq. ft. horizontal area and 36” minimum dimensions and equipped with ladders/steps for escape.

11. Room labeled _____ is considered a habitable space/sleeping room. Items D.2, D.3, D.6., D.7, D.9, and D.10 may apply.

12. Hallways shall be a minimum width of 36”. (CBC 1017.2)

13. Show stairways and landings (CBC 1009.1, 1009.2, 1009.3, 1009.4, 1012.2, 1205.4) with:
    a) minimum width of 36”;
    b) minimum headroom of 6’-8”;
    c) rise between 4" and 7.75";
    d) minimum run of 10" (for winding stairs: 6” minimum at narrowest point and 10" minimum at 12" from inside radius);
    e) tread nosings between 0.75” and 1.25” on stairways with solid risers (when treads less than 11”);
    f) minimum landing depth of 36”;
    g) handrail height 34" to 38" above tread nosings;
    h) permanently wired lighting of not less than 1 foot-candle at tread runs;
    i) complete structural detailing.

14. Enclosed space under stairs to be protected with 1/2” gypsum board on the enclosed side. (CBC 1009.5.3)

15. Provide 42"-high protective guardrail for porches, balconies, decks, and open sides of landings. Maximum clear opening between any members of the guardrail shall be less than 4". (CBC 1013.2 and 1013.3)

16. Exterior doors may not swing outward for drops exceeding 1/2” (CBC 1008.1.6). Dimension all drops at exterior doors.

17. Safety glazing (tempered glass) is required (CBC 2406.3) for windows:
    a) adjacent to bathtubs, showers, hot tubs, whirlpools, and saunas, and within 60" of the floor;
    b) within a 24" arc of either vertical edge of doors in the closed position and within 60" of the floor;
    c) within 18" vertically and 36” horizontally of a walking surface, where the individual pane is greater than 9 sq. ft. and the top edge is greater than 36" above the floor;
    d) adjacent to stairways, ramps, and landings, or within 5’-0” horizontally of the bottom of stairways, where the bottom edge is within 60” of the walking surface.

18. Detail floor/ceiling and wall assemblies between dwelling units. Show 1-hour fire-resistance rating (1/2-hour rating allowed in dwellings equipped with fire sprinklers) and sound transmission control. (CBC 419.2, 419.3, and 1207.6)

E. GARAGE REQUIREMENTS

1. Provide minimum 1/2” gypsum board from floor to roof sheathing on garage side of walls separating garage and dwelling unit. (CBC 406.1.4)

2. Provide minimum 5/8” Type X gypsum board at garage ceilings with habitable rooms above and minimum 1/2” gypsum board at walls supporting this floor/ceiling fire separation. (CBC 406.1.4 and 711.4)

3. Door between garage and dwelling shall be self-closing, tight-fitting, and either 1 3/8"-thick solid wood or 20-minute fire-protection rated. (CBC 406.1.4)

4. Doors may not swing into garage when there is more than 1/2" drop from the house (CBC 1008.1.6). Dimension the step from the house to the garage.

5. Under no circumstances are garages allowed to open into a room used for sleeping purposes. (CBC 406.1.4)

6. Provide a minimum 18" high platform – from source of ignition – for water heater and heating/cooling equipment capable of igniting flammable vapors (unless listing report number provided showing ignition-resistant appliance). (CPC 508.14(1) and CMC 308.1)

7. Provide protection of water heater and/or heating/cooling equipment subject to vehicular impact. (CPC 508.14)

F. ELECTRICAL, MECHANICAL, AND PLUMBING REQUIREMENTS

1. Provide an electrical legend to identify all symbols used.

2. Ground Fault Circuit Interrupter (GFCI) outlets are required in bathrooms, at kitchen countertops, laundry and wet bar sinks, in garages, in crawlspaces, in unfinished basements, and outdoors. (CEC 210.8)

3. Bedroom electrical circuits must be protected by Arc Fault Circuit Interrupter (AFCI) outlets. (CEC 210.12)

4. Storage rooms/areas are allowed only one light and one electrical outlet.

5. *Note on plans:* "The project will comply with the County of San Diego lighting ordinance."

6. On the floor plan, show the location of all electrical panels (meter panels and sub panels). Provide a 30" wide by 36" deep workspace in front of all panels. Panels are to be located to minimize the probability of communicating fire to adjacent combustible materials. Panels are not allowed in bathrooms.

7. Indicate location of heating units and water heaters on floor plan. (CBC 1204.1)

8. Gas-fired water heaters and furnaces located in bedrooms or bathrooms must use outdoor combustion air and be installed in a closet with a listed gasketed, self-closing door (except direct-vent appliances). Closet must be for exclusive use of water heater and/or furnace. (CPC 505.0 and CMC 904.1)

9. Provide 30" x 30" attic access in hallway or other accessible location for mechanical equipment in the attic. A 22" x 30" access may be used if the largest piece of equipment can be removed through the opening. (CMC 904.11)

10. Note on plans that water heaters require a minimum of two (2) straps to resist horizontal displacement. Specify a minimum of ¾" x 24-gauge straps with ¼" x 3" lag bolts attached directly to the framing. (CPC 508.2)

11. Show a minimum 4" diameter dryer vent to exterior. Vent limited to 14'-0" length with two 90° bends. (CMC 504.3.2.1)

12. Show make-up air source for clothes dryer located in closet. Provide 100 sq. in. minimum opening. (CMC 504.3.2)

13. Provide exhaust fans in bathrooms, powder rooms and water closet compartments. (CMC Table 4-4)

14. Provide 30" width and 24" front clearance at water closets. (CPC 407.6)

15. Showers shall have a minimum area of 1,024 sq. in. and be able to encompass a 30" circle. Shower doors shall have a minimum unobstructed width of 22". Provide dimensions on floor plans. (CPC 411.7)

16. Note on the plot plan if the property is serviced by propane (LPG) or natural gas.

17. Dimension the location and show the size of any propane tanks on the plot plan. Propane tanks up to 500-gallon capacity must have a minimum clearance of 10'-0" from any structure or property line.

18. Show the location of all LPG appliances. LPG appliances shall not be installed in crawlspaces, pits, or basements. No LPG piping is allowed in slabs within the structure. (CMC 304.7)

19. Provide ICC, UL, or equivalent listing report number for prefab fireplace/wood-burning stove. Chimney shrouds used on prefab fireplaces must be part of the approved fireplace assembly.

20. Masonry fireplaces must be constructed per county details (make completed form DPLU #180 a permanent part of plans) or provide engineered design, including structural details and calculations. (CBC 2111 and 2113)

21. *Note on plans:* "Fireplaces with gas appliances are required to have the flue damper permanently fixed in the open position and fireplaces with LPG appliances are to have no 'pit' or 'sump' configurations." (CMC 304.7)

22. Show a 2'-0" chimney height above the building within a 10'-0" horizontal radius of the chimney. The chimney must extend at least 3'-0" above the highest point where the chimney passes through the roof. (CBC 2113.9)

G. ENERGY EFFICIENCY REQUIREMENTS

1. Provide complete energy efficiency compliance documentation. Project shall comply with the 2005 Residential Energy Standards.

2. This project shall comply with energy requirements for climate zone _____.

3. CF-1R form shall be completed and made a permanent part of the plans. Compliance statement shall be signed.

4. Designer's license number shall be on CF-1R form. If designer is unlicensed, owner shall sign compliance statement for designer.

5. Form WS-4R Fenestration—Maximum Allowed Area Worksheet shall be completed and made a permanent part of the plans.

6. Building orientation in compliance documents must be consistent with plot plan and floor plan.

7. Show wall, ceiling, raised-floor, and slab-perimeter insulation and specify the R-value on the building sections per the CF-1R form.

8. Show glazing per the CF-1R form (i.e., orientation, area, type, U-factor, SHGC value).
9. Show any special features on the plans (e.g., shading screens, thermal mass, etc.).

10. Specify efficiency and capacity/size of heating units and water heaters on CF-1R form.

11. Performance calculations are required for multiple water heaters, water heaters larger than 50-gallon capacity, and water heaters without a standard distribution system.

12. Provide a **large, clear** note on the roof framing plan: "Radiant barrier is required."

13. MF-1R form shall be completed and made a permanent part of the plans.

14. Fluorescent fixtures must be of the ballasted type that only accepts fluorescent bulbs with a minimum efficacy of 40 lumens per watt.

15. At least half the installed wattage of luminaires in kitchens shall be high efficacy; all other fixtures must be switched separately. Form WS-5R Residential Lighting Worksheet shall be completed and made a permanent part of plans.

16. All luminaires in bathrooms, garages, laundry rooms, utility rooms, and other rooms shall either be high efficacy or controlled by an occupant sensor (or dimmer switch for other rooms only). Specify one of these measures for each new or remodeled room.

17. Specify high-efficacy luminaires or a photo-control/motion-sensor combination for each outdoor lighting fixture.

18. In order to accommodate the required insulation thickness, a minimum rafter/stud depth of _____ will be required.

19. Clearly note on the plot plan that HERS verification and/or diagnostic testing is required. Properly completed and signed CF-4R and CF-6R forms shall be provided to the inspector in the field.

H. ROOF ASSEMBLY REQUIREMENTS

1. Specify roof material and underlayment.

2. Specify ICC, UL, or equivalent listing report number and manufacturer for roofing material (tile, metal, built-up, etc.).

3. *Note on the plans:* "Roofing shall have a class 'A' fire rating." (County Building Code 1505.1)

4. Specify roof pitch.

5. Roof pitch is not adequate for roof type specified (CBC Chapter 15). Provide minimum pitch of _____.

6. Specify 1/4":12" minimum roof pitch for drainage or design to support accumulated water. (CBC 1506.1)

7. Detail roof drains/overflows and show their locations. Separate drain and overflow outlets required. (CPC 1101.11)

8. Specify approved waterproof decking material for balconies/decks over interior spaces (CBC 1402.3). Specify ICC, UL, or equivalent listing report number.

9. Provide calculation showing attic ventilation area of at least 1/150th of attic area. Indicate vent sizes and locations on roof plan. Vents must be located to provide adequate cross ventilation. (CBC 1203.2)

10. Specify ICC, UL, or equivalent listing report number for skylights. Show skylight sizes and locations on floor plan and roof plan.

I. FIRE-RESISTIVE CONSTRUCTION IN WILDLAND INTERFACE AREAS

1. On the plot plan, show the location and dimension the size of the fuel modification zone. A minimum 100'-0" fuel modification zone is required around all structures. If 100'-0" fuel modification cannot be provided around perimeter of all structures, enhanced requirements will apply. Fuel modification zone is not allowed to cross property lines or encroach into open space easements. If lot is too small for 100'-0" fuel modification zone, then note on plot plan that entire lot is fuel modified. (County Fire Code 4707.2)

2. Move the structure so that it is a minimum of 30'-0" to any property line. (County Fire Code 4707.1.1)

3. In roof coverings where the profile allows a space between the roof covering and roof decking, the spaces at the eave ends shall be constructed to prevent the intrusion of flames and embers, fire-stopped with approved materials (e.g., non-combustible birdstop for curved tile), or have one layer of No. 72 ASTM cap sheet installed over the combustible decking. Provide a note on the elevation sheet specifying how this will be done. (County Building Code 704A.1.2)

4. Roof gutters shall be provided with the means to prevent the accumulation of leaves and debris. (County Building Code 704A.1.5)

5. Skylights shall be tempered glass. (County Building Code 704A.1.6)

6. All vents (roof, foundation, combustion-air, etc.) shall resist the intrusion of flames and embers or shall be protected by louvers and ¼" non-combustible, corrosion-resistant mesh. Turbine attic vents shall be equipped to allow rotation in only one direction. (County Building Code 704A.2.1)

7. Vents shall not be installed in eaves, eave overhangs, soffits, or cornices. Gable-end vents will be allowed if the vents are located a minimum of 12" below the lowest eave/rake projections. (County Building Code 704A.2.2)

8. Eaves, soffits, and fascias shall be constructed as required in guidance document DPLU #198. Provide eave details. (County Building Code 704A.2.3)

9. Specify exterior wall finish. Exterior wall surfaces shall be non-combustible (stucco, masonry, cement fiber board, etc.), ignition-resistant, heavy timber, or log wall construction. Wood siding (3/4" thick) or plywood (3/8" thick) may be used with an underlayment of 15# felt and 1/2" fire-rated gypsum board. (County Building Code 704A.3.1)

10. Underfloor areas shall be enclosed to the ground with exterior wall construction per item I.9. (County Building Code 704A.4.2.2)

11. Exterior windows, window walls, glazed doors, and glazed openings within doors shall be dual-glazed units with a minimum of one tempered pane **or** shall be glass block units **or** shall have a fire-resistance rating of not less than 20 minutes. Glazing frames made of vinyl shall have welded corners and metal reinforcement in the interlock area. Provide note on elevation sheet and window schedule. Specify frame material and an approved manufacturer or provide manufacturers' info documenting compliance. (County Building Code 704A.3.2.2)

12. Exterior doors shall be of approved non-combustible construction **or** of solid-core wood not less than 1 3/8" thick **or** 20-minute fire-rated. (County Building Code 704A.3.2.3)

13. Projections such as decks, carports, balconies, patio covers, trellises, etc., shall be of non-combustible material **or** one-hour fire-resistive material **or** approved exterior fire-retardant treated wood **or** modified heavy-timber construction consisting of roof framing with minimum 2x T&G decking, 4x6 rafters, 6x6 columns/posts and/or floor framing with minimum 3x decking, 4x10 or 6x8 beams, 4x8 joists, 6x6 columns/posts. Detail the construction. (County Building Code 704A.4.1)

14. Paper-faced insulation is prohibited in attics or other ventilated spaces. (County Building Code 706A.1)

15. The first five feet of fences and other items attached to a structure shall be constructed of non-combustible material **or** approved exterior fire-retardant wood **or** material that meets the same fire-resistive standards as the exterior walls of the structure. Provide note on plot plan and/or elevation sheet. (County Building Code 707A.1)

J. FRAMING REQUIREMENTS

1. Provide a complete roof/floor framing plan.

2. Show on plans all recommendations made in engineering calculations.

3. Provide complete structural detailing for the project.

4. Cross-reference all framing details with the appropriate plans.

5. Delete all non-applicable details from plans.

6. Special inspection is required for: _____. Complete form DPLU #6 (or equivalent) and make a permanent part of plans. Specify certified special inspector and phone number on the form.

7. Provide a **large, clear** note on the plot plan: "Special inspection is required. Please see special inspection form on sheet _____."

8. Specify plywood grade, thickness, panel span rating, and nailing for roof/floor sheathing. (CBC Table 2304.7(3))

9. *Note on plans:* "Plywood shall be continuous under California fill."

10. Specify size, orientation, and spacing of all members – rafters, ceiling joists, beams, floor joists, headers, posts, columns – on framing plans.

11. Provide two complete sets of truss drawings (CBC 2303.4). Coordinate with roof framing plan.

12. Identify trusses on roof framing plan by file/ID/sequence number or make truss layout a permanent part of plans.
13. Design trusses for bearing at perpendicular interior shear walls.
14. Specify 1/2” clearance between trusses and non-bearing walls.
15. Show support for ridge/hip/valley intersections.
16. Provide rafter ties where ceiling joists are perpendicular to rafters. (CBC 2308.10.4.1)
17. Provide metal straps across ridge beam and rafters.
18. Specify camber requirements and combination symbol for all glue-laminated wood members on plans.
19. *Note on plans:* "A certificate of conformance is required prior to framing inspection for glue-laminated wood members."
20. Specify the make and model number of all proposed truss/beam/joist hangers.
21. Specify size and type (double stud, post, etc.) of support for beams/headers – 4x12 and larger – and girder trusses.
22. Detail all beam-to-post, post-to-beam, and post-to-footing connections.
23. Specify stud size and spacing for all walls.
24. Balloon frame walls of rooms with sloping ceilings (rake walls). Specify on plans which walls are balloon framed.

K. LATERAL REQUIREMENTS

1. Show location, type, and length of all shear walls on structural plans and coordinate with shear-wall schedule.
2. Specify nail size and spacing for all shear walls and roof/floor diaphragms. Specify required blocking.
3. Provide shear-transfer connection details for shear walls (interior and exterior) at roof, floors, and foundation. Cross-reference all shear-transfer details with the appropriate plans.
4. Make manufacturer‘s structural detail sheet(s) for engineered shear panels (e.g., Strong-Wall, Hardy Frame, TJ, Shear Max, etc.) a permanent part of the plans.
5. Building does not meet conventional bracing requirements of CBC 2308. Provide engineered design for lateral-force resistance.
6. Spacing between interior and exterior braced wall lines shall not exceed 25’0” on each story (CBC 2308.12.3).
7. Shear walls shall start at not more than 8’-0” from each end of a braced wall line. (CBC 2308.12.4)
8. Cumulative length of shear walls on each required braced wall line shall comply with CBC 2308.9.3 and 2308.12.4.
9. Maintain maximum shear wall dimension ratios per CBC Table 2305.3.4.
10. All shear panels must extend to the roof/floor diaphragm above.
11. Provide drag straps on each side of bay windows and flush beams where plate lines are interrupted.
12. Where shear wall forces exceed 350 pounds per foot, all foundation sill plates and framing members receiving edge nailing shall be minimum 3x member (CBC 2305.3.11 and Table 2306.4.1).
13. Specify location/type of all hold-downs on foundation plan (grade-level hold-downs) and framing plan (upper-level hold-downs).
14. Justify the short-period response acceleration, S_S, and 1-second period response acceleration, S_1, used in the engineering calculations. (CBC 1613)
15. Justify the response modification coefficient, R, used in the engineering calculations (CBC 1613).
16. Justify the value of the redundancy factor, ρ, used in the engineering calculations (CBC 1613).

L. FOUNDATION REQUIREMENTS

1. Provide a complete and fully dimensioned foundation plan.

2. Show on plans all recommendations from soils and/or compaction reports.

3. Provide calculation showing underfloor ventilation openings of at least 1/150th of crawl-space area. Indicate vent sizes and locations on foundation plan. Vents must be located so as to provide adequate cross ventilation. (CBC 1203.3)

4. Show minimum 18" x 24" access to all crawl-space areas on foundation plan. (CBC 1209.1)
5. Provide underfloor clearance of 18" for floor joists and 12" for floor girders off grade. (CBC 2304.11.2.1)

6. Show 8" clearance off adjacent grade for wood framing/sheathing resting on exterior foundation walls/footings. (CBC 2304.11.2.2)

7. Foundation plates or sills shall be bolted to the foundation with not less than 1/2"-diameter steel bolts embedded at least 7" into concrete or masonry and spaced not more than 6'-0" apart. There shall be a minimum of two bolts per piece with one bolt located not more than 12" or less than 4" from each end of each piece. Steel plate washers a minimum of 3" x 3" x 0.229" shall be used on each bolt. (CBC 2308.6 and 2308.12.8)

8. *Note on foundation plan:* "All hold-downs must be tied in place prior to foundation inspection."

9. Provide footing details specifying all dimensions and reinforcement. Cross-reference all details with foundation plan.

10. Provide adequate footings under all bearing walls and shear walls.

11. Provide spread footings under: _____.

12. Specify slab thickness, reinforcement and moisture barrier.

13. Site inspection revealed presence of expansive soils. Provide soils report for clay-soil foundation design (County standard requirements on form DPLU #65 may be used for single-story buildings).

14. Horizontal distance from bottom leading edge of footing to daylight shall be 7'-0" minimum or as recommended by soils report.

15. Specify maximum height of stem walls. Unreinforced stem wall height to width ratio is 6:1 maximum if the top is restrained by the floor system, 3:1 maximum if the top is unrestrained. (County Policy TB-2907-1 and TB-2907-2)

16. Provide a step footing detail.

17. Specify retaining wall material, dimensions, maximum retained height, and overall height on details per engineering calculations.

18. Specify size/spacing and dimension location of vertical and horizontal wall reinforcement on retaining wall details.

19. Show how foundation retaining walls adjacent to usable space are to be waterproofed.

M. SUPPLEMENTAL REMODEL REQUIREMENTS

1. On floor plan, show adjacent rooms with window sizes indicated (including windows to be removed as a part of this construction) to verify compliance with light, ventilation, and egress requirements.

2. Smoke detectors are required in each existing sleeping room and in the hallway/area serving each sleeping area. Battery-operated detectors are acceptable for existing construction. (CBC 907.2.10.5.1)

3. In addition to any toilets being added to the building as a result of this project, all existing toilets must be replaced with ultra-low-flow toilets. *Note on the plans:* "All water closets in this building to be State of California, Department of Housing & Community Development approved with maximum 1.6 gallons per flush." (CPC 402.1)

4. Provide a positive connection between addition and existing building at foundation and at plate lines.

5. Specify and detail the method for installing hold-downs in existing foundations.

6. Provide framing and/or foundation plans for the existing structure at:_____